



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-------------|----------------------|---------------------------------|------------------------|
| 10/748,441 | 12/29/2003 | Bennett Cookson JR. | 019404-001200 | 2382 |
| 20350 7590 11/21/2007 TOWNSEND AND TOWNSEND AND CREW, LLP TWO EMBARCADERO CENTER EIGHTH FLOOR SAN FRANCISCO, CA 94111-3834 | | | EXAMINER GISHNOCK, NIKOLAI A | |
| | | | ART UNIT 3714 | PAPER NUMBER |
| | | | MAIL DATE 11/21/2007 | DELIVERY MODE PAPER |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/748,441

Applicant(s)

COOKSON ET AL.

Examiner

Nikolai A. Gishnock

Art Unit

3714

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 September 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-41 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-41 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____

- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

In response to Applicant's remarks filed 9/6/2007, claims 1-41 are pending.

Claim Rejections - 35 USC § 101

1. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

2. Claims 1-14 and 29-38 are rejected under 35 U.S.C. §101 as being directed to nonstatutory subject matter. The claims fail to produce a tangible effect. The requirement to be tangible is for the claim to produce a real-world result or beneficial product. The claims fail because they merely evaluate abstract functions and do not bring about a substantial practical application. Claims 1-14 are directed to a computer system that merely sends and receives data, comparing and consolidating the data, creating records, calculating scores, and further data manipulation, without actually displaying results or output. Likewise, claims 29-38 are directed to receiving data requests, storing the data, identifying and analyzing records, assigning types and scores, constructing the tree (data), and sending the file. There is no recitation in the method claims that a tangible product or result is produced. Thus the claims are considered non-statutory.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

Art Unit: 3714

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1, 7-15, 18, 19, 21-34, and 38-41 are rejected under 35 U.S.C. 102(b) as being anticipated by Huff (US 2002/0032687 A1), hereinafter known as Huff. Huff discloses a system and method for creating a family tree, comprising: receiving genealogy data from at least one primary source at a host computing system (Para. 0027 & 0014), creating one or more node records and link records using the data (Para. 0028), where individual node records include at least name data (Para. 0036) and link records include data that represents a relationship between individual node records (Para. 0098); comparing individual node records and identifying pairs of records having similar data; comparing each identified pair of node records having similar data, and deciding based on predetermined criteria whether the identified records represent the same person; consolidating the information from a plurality of records into a single person record (online accumulation and comparison of data from multiple sources with the goal of accurate linking to overcome duplication, Para. 0123; Predetermined criteria in Para. 0164); receiving a request from a user computer to display a family tree (Para. 0210); using the link, node, and single person records to create a data representation of the requested family tree; and sending the data representation to the user computer (Para. 0209) [Claims 1 & 15]. Huff discloses where the genealogy data is selected from a group consisting of a birth certificate database and a death certificate database (birth, marriage, death, burial, and so forth, Para. 0100), a census database (Para. 0091), and a family history records database (Home PC data, Internet data, Ancestral File, and International Genealogical Index, Para. 0089) [Claims 7 & 21]. Huff discloses receiving genealogy data as a GEDCOM file (Para. 0024) [Claims 8 & 22]. Huff discloses where the records are used to create a file comprising the requested family tree including alternatives for relationships for display to a user, comprising: receiving a selection

Art Unit: 3714

representing a user choice among the alternatives (when family connections are discovered in the database, a separate set of links can be created to complete those ties between all descendant collections, Para. 0116); using the selection to update the family tree (Para. 0088); and storing the selection (Para. 0091) [Claims 9 & 23]. Huff discloses receiving new information that changes the family tree; and providing the user an opportunity to revise the selection (adding extra data for names already in the database and/or making corrections to data, Para. 0218) [Claims 10 & 24]. Huff discloses receiving information from a user, comprising a selection for the group consisting of a digital picture, a text file, genealogy data, a user-entered text file, a sound file, a video file, and a computer-readable file (Para. 0036); and storing the information where it is available to other users (storing names and data of people; displaying genealogical data to a plurality of users, Para 0036) [Claims 11 & 25]. Huff discloses receiving additional genealogy data subsequent to sending the file to the user computer (allows any interested party to add links between database names without making changes to the submission data, Para. 0100; changes are inherently made subsequent to the submission data having been sent to the user's computer); and notifying the user of the changes (automating the notification for genealogy research, Para. 0100) [Claims 12 & 26]. Huff discloses where notifying the user comprises a selection from the group consisting of: displaying a notification to the user upon the user accessing the host system (Online "Auction" or Bulletin Board" Facility, Para. 0214-0215; also, Fig. 4 for the display) [Claims 13 & 27]. Huff discloses receiving a request from the user computer to send more detailed information relating to the family tree, subsequent to sending the file; using the records to compile the more detailed information; and sending the more detailed information to the user computer (all at Para. 0094; also Para. 0117-0118) [Claims 14 & 28]. Huff discloses where the individual node records span a single generation (main table Person_T contains the name and basic identifying items assigned to that {one} person, Para.

Art Unit: 3714

0135) [Claim 18], or multiple generations (Links_T table contains links to the all the name records in the family, Para. 0137; Links_T can be used separately from the Person_T name data record, Para. 0138) [Claim 19]. Huff discloses a system and method for creating a family tree, comprising: receiving data at a host computer system (central server, Para. 0027) that defines a plurality of personas (having a capacity for storing names and data on up to 10 billion people, Para. 0036), where the data comprises one or more assertions {events or attributes, or other presumed truths about a persona} for each persona, where each persona represents a person (events such as birth, marriage, death, or burial; attributes such as health, medical, and genetic data; all in Para. 0100); storing each persona as a persona record (Para. 0028); receiving a request from a user at the host computer to provide a family tree (Para. 0210), where the request comprises at least one assertion (Indexing and cross-reference; Para. 0170-0183); identifying an initial persona record and performing an analysis to infer any relationships with other persona records using the assertions of the initial persona record and the other records (comparing indexed records having the same source notation, such as census record or land record entries, Para. 0172); if inferred, assigning at least one relationship type to the relationship between the records (links to tie together family connections, Para. 0116); using the persona records and the relationship types to construct a family tree (pedigree charts, Para. 0206); and sending the file comprising at least a portion of the family tree to the user (server would take the selected data and create the image in the appropriate player, Para. 0209) [Claims 29 & 39]. Huff discloses repeating the attempt to infer and assign types for the other persona records until no additional relationships are inferred (the process {of minimizing duplication} is cumulative, Para. 0163) [Claim 30]. Huff discloses where the initial persona record is identified using the last name provided by the user (index to surname, Para. 0039; user would indicate the {initial} name to begin with, Para. 0210) [Claim 31]. Huff discloses where

Art Unit: 3714

the relationship analysis is performed prior to receiving the request from the user (the computer and professional participants would do most of the work {consolidating the data} before the users even looked at the data, Para. 0155) [Claim 32]. Huff discloses where the assertions for a particular persona record originate from a single source (such as the IGI, a large database containing some 300 million names and linking data, Para. 0089) [Claim 33]. Huff discloses where the single source comprises a selection from the group consisting of a census record, a user input (manual conversion from raw source records input data, Para. 0090), and a government record (Internet data, Para. 0089; which includes U.S. decennial censuses, Para. 0091; and see www.census.gov) [Claim 34]. Huff discloses where the relationship types comprise a selection from the group consisting of a same person, or a spouse (Para. 0098, 0137, and 0213) [Claim 36]. Huff discloses where assertions comprise a selection from the group consisting of name, birthday, and death day (Para. 0135), and birth city (birth place, Para. 0044) [claim 38]. Huff discloses where the request from the user comprises at least a name Para. 0210) [Claim 40]. Huff discloses where the host computer is operable to perform the relationship analysis in response to a request from the user (Ancestral File previously used automatic comparison process, Para. 0165-0166) [Claim 41].

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Art Unit: 3714

6. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

7. Claims 2 & 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Huff, in view of Griswold et al. (US 4,501,559). Huff teaches using the genealogy data to create surname records (Person_T database table, Para. 0135), including a surname (Para. 0039), and data representing the number of times the corresponding surname is encountered in the genealogy data (the computer counts the connections of the old name to be deleted, and then counts the connections of the name to replace it, Para. 0164), and using the surname records to partition the individual node records into groups prior to comparing the individual node records (the new name must have as many links as the old name {to replace the old name's record}, Para. 0164-0165, the counting and comparison of the new name's group inherently occurs after the counting of the old name's group, because of the use of the word "then") [Claims 2 & 16]. What Huff fails to explicitly teach is where the data representing the number of times the surname is encountered is part of the surname record. However, Griswold teaches the art of including the number of times a surname is encountered in the data into a data record (surname indicator on genealogy chart, 5:44-48, using Arabic numerals, 6:26-46). Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made, to have added a data field to Person_T table of Huff representing the number of times the surname was encountered, as taught by Griswold, in order to avoid recounting the surname instances on

Art Unit: 3714

every access of the data, thereby saving processing time, and also to keep an index to the maternal families whose surname is often obscured by marriage [Claims 2 & 16].

8. Claims 3-6, 17, 20, 35, & 37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Huff, in view of Kane et al. (US 6,389,429 B1), hereinafter known as Kane. Huff teaches all the features as demonstrated above in the rejection of claims 1, 15, & 29. Huff also teaches where the individual node records span a single generation (main table Person_T contains the name and basic identifying items assigned to that {one} person, Para. 0135) [Claim 5], or multiple generations (Links_T table contains links to the all the name records in the family, Para. 0137; Links_T can be used separately from the Person_T name data record, Para. 0138) [Claim 6]. What Huff fails to teach is where comparing the individual node records and identifying pairs of records having similar names comprises calculating a score representing the likelihood that the identified pair of individual node records represent the same person [Claims 3 & 17], and where comparing and deciding whether the identified pair of individual node records represent the same person comprises revising the score [Claims 4 & 20], and using the assertions of the initial persona record to assign a score to each relationship, where the score represents a likelihood that the relationship correctly reflects a relationship between the persons represented by the personas [Claim 35] and assigning assertion scores to the assertions, which reflect a likelihood that a particular assertion correctly reflects an analogous assertion of the person represented by the persona [Claim 37]. However, Kane teaches a system and method for creating and maintaining a database of persons based on a multiple source database, where the relative accuracy of data elements is ranked, and comparisons are made of the data fields in order to rank the source and target database records, to identify the most closely matched database record. If such a record is identified, the fields having a higher ranking than the fields

Art Unit: 3714

in the target database are updated (abstract). Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made, to have quantitatively scored the persona records and assertions of Huff to accurately predict whether the records described the same person, and to have scored the assertions to decide which to link to the final persona record in the finished database, using the system and method of Kane, in order to keep the information from being and replicated, and also in order to keep the persona records up-to-date. [Claims 3-6, 17, 20, 35, & 37].

Response to Arguments

9. Applicant's arguments filed 9/6/2007, see page 11, in regards to the rejection of the claims under 35 USC 101 have been fully considered but they are not persuasive. The claims as best understood by the Examiner fail to produce a tangible effect. The requirement to be tangible is for the claim to produce a real-world result or beneficial product. The claims fail because they merely evaluate abstract functions and do not bring about a substantial application. The limitations do not cause an output or other indication to a user that something has occurred. If the claim does not entail the *physical* transformation of an article, then the claim shall be reviewed to determine that it produces a useful, tangible, and concrete result. In making this determination, the focus is not on whether the steps taken to achieve a particular result are useful, tangible, or concrete, but rather on whether *the final result achieved* by the claimed invention is useful, tangible, and concrete. If the claims are found not to have such a practical application, then the claim is determined to be nonstatutory. See MPEP 2106. In the instant claims, mere recitation of interactions between a host computer and a user computer, as well as receiving, storing, comparing, and consolidating information, are understood to be virtual processes. Further, no tangible real world product or physical output is claimed.

Art Unit: 3714

10. Applicant's arguments filed 9/6/2007, see page 12, in regards to the rejection of claims 1, 12, 29, & 39 under 35 USC 102(b) in view of Huff have been fully considered but they are not persuasive. The applicant states that Huff does not anticipate "comparing individual node records and identifying pairs of records having similar data; for each identified pair of node records, comparing related individual node records and deciding, based on predetermined criteria, whether the identified pair of individual node records represent the same person, and consolidating the information from a plurality of records determined to represent the same person into a single person record", the "predetermined criteria" taught by Huff in Para. 0164 is not used to decide whether records represent the same person. However, Huff teaches comparing individual node records and identifying pairs of records having similar data, and comparing related individual node records and deciding if they represent the same person (there might be indexed records that have the same source reference notation, such as two census records entries, or two land record entries, perhaps put in by different people, where both references point to the same person or to related people (on a common page). *These matching references could then be checked to see what people they point to.* If they point to the same person, you might not have any new information, but just a confirmation. Or if they point to two different numbered people with the same name, a duplicate situation that needs attention may have been found, Para. 0172), and consolidating the information from a plurality of records into a single person record (In prior genealogical databases, *each name on the search list allows entry into a different pedigree structure that can be navigated and examined. For each of those names one could request an ancestor summary report and thus know which one might contain the most data and so be most interesting to examine.* But that could lead to huge amounts of confusion and endless duplication of effort by all users interested in any particular set of people. *It would be better to consolidate the data and minimize the number of names one*

Art Unit: 3714

needs to examine. In effect, the computer and professional participants would do most of this work before the users even looked at the data, Para 0155; As a means of increasing the economic incentive to minimize duplication, publishers could make the links needed and then through "deletes" make their names the only ones that show up in the search lists for that area of the database. The process is cumulative. *First the submitters make the connections from the shorter pedigree to the longer pedigree. Then they enter delete transactions to make the duplicate names disappear from search lists,* Para. 0162-0163). The process of navigating and examining names on a search list, identifying duplicate names, consolidating the pedigree connections, and then hiding or shadow deleting the duplicate entry, as taught by Huff appear to anticipate Applicant's claim 1. Further, the predetermined criteria of Para. 0164 refers to the connections of linked names, to wit, Huff's pedigrees (Before the record is stored in the database and the indicator is set on, the computer first counts the connections of the old name to be deleted. It then counts the connections of the name to replace it. The new name must have at least as many links backward (plus spouse and children--sideways and forward) as does the old name, Para. 0164). The pedigree's are predetermined, having been established and previously entered into the database, and are in fact the basis upon whether the records represent the same person. This predetermined criterion of pedigrees taught by Huff further anticipates Applicant's claim 1. Thus, the argument is not persuasive.

Conclusion

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Hermansen et al. (US 6,963,871) discloses a name-searching system to analyze ethnic names to determine if alternate spellings represent the same search subject.

Art Unit: 3714

- Pawlick (US 6,910,050) discloses an animal registry system that keeps a database of animal breed and lineage.

12. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nikolai A. Gishnock whose telephone number is 571-272-1420. The examiner can normally be reached on M-F 8:30a-5p.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Xuan M. Thai can be reached on 571-272-7147. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3714

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

NAG

NAG
11/19/2007

Ronald Laneau

Ronald Laneau
Primary Examiner
Art Unit 3714

11/20/07